

Substitute for Form 1449/PTO

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

Application Number

09/955,537

Filing Date

September 17, 2001

First Named Inventor:

Manish Shah

Art Unit

2631


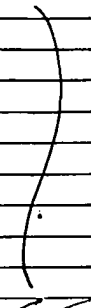

Examiner Name

Not Yet Assigned



Attorney Docket Number

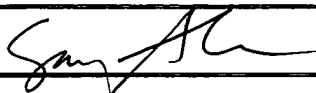
004259.P035

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code ² (If known)					
		US-	4,015,238	3/29/1977	Robert Curtis Davis	<div>RECEIVED</div> <div>AUG 1 1 2004</div> <div>Technology Center 2000</div>	
		US-	5,027,374	6/25/1991	Mark W. Rossman		
		US-	5,291,499 A	3/1/1994	Behrens et al.		
		US-	5,295,142	3/15/1994	Izumi Hatakeyama		
		US-	5,349,608	9/20/1994	Graham, et al.		
		US-	5,608,737 A	3/4/1997	Kimura, et al.		
		US-	5,907,586	5/25/1999	Katsuragawa, et al.		
		US-	6,189,126 B1	2/13/2001	Ulmer, et al.		
		US-	6,266,687 B1	7/24/2001	Leyonhjelm, et al.		
		US-	6,278,725 B1	8/21/2001	Rouphael et al.		
		US-	6,301,314 B1	10/9/2001	Murayama, Jun		
			US-	6,563,889 B1	5/13/2003		Shih, et al.
			US-				
			US-				
			US-				

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
		WO	00/74264	A1	12/7/2000	Martone, Massimiliano		
		WO	01/59937	A2	8/16/2001	Qualcomm Inc.		

Examiner
Signature

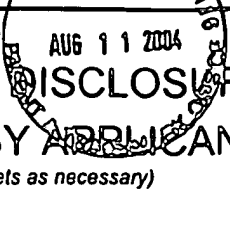
Date Considered

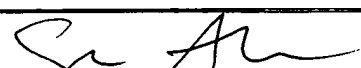
1/13/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div> <p>Substitute for Form 1449/PTO</p> <p>INFORMATION DISCLOSURE</p> <p>STATEMENT BY APPLICANT</p> <p><i>(use as many sheets as necessary)</i></p> </div> <div style="text-align: center;">  </div> </div>				<p>Complete if Known</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>09/955,537</td> </tr> <tr> <td>Filing Date</td> <td>September 17, 2004</td> </tr> <tr> <td>First Named Inventor:</td> <td>Manish Shah</td> </tr> <tr> <td>Art Unit</td> <td>2631</td> </tr> <tr> <td>Examiner Name</td> <td>Not Yet Assigned</td> </tr> <tr> <td>Attorney Docket Number</td> <td>004259.P03</td> </tr> </table>		Application Number	09/955,537	Filing Date	September 17, 2004	First Named Inventor:	Manish Shah	Art Unit	2631	Examiner Name	Not Yet Assigned	Attorney Docket Number	004259.P03
Application Number	09/955,537																
Filing Date	September 17, 2004																
First Named Inventor:	Manish Shah																
Art Unit	2631																
Examiner Name	Not Yet Assigned																
Attorney Docket Number	004259.P03																
Sheet	2	of	2	<p>RECEIVED</p> <p>AUG 11 2004</p> <p>Technology Center 2600</p>													
<p>NON PATENT LITERATURE DOCUMENTS</p>																	
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²												
[Signature]		BREE, ET AL., "A Bit-Serial Architecture For A VLSI Viterbi Processor", Communications Systems Research Group, University of Saskatchewan, Saskatoon, IEEE, WESCANEX '88, 1988, pages 72-77.															
[Signature]		BIVER, ET AL., "Architectural Design and Realization Of A Single-Chip Viterbi Decoder", Elsevier Science Publishers B.V., INTEGRATION, The VLSI Journal 8 (1989), October, No. 1, Amsterdam, NL, Pages 3-16.															
[Signature]		BREE, ET AL., "A Modular Bit-Serial Architecture For Large Constraint-Length Viterbi Decoding", Communications Systems Research Group, University of Saskatchewan, Saskatoon, Canada, IEEE International Conference on Communications", 1990, pages 1501-1506.															
[Signature]		CHOI, ET AL., "Viterbi Detector Architecture For High-Speed Optical Storage", 1997, IEEE TENCON - Speech and Image Technologies for Computing and Telecommunications, ASIC Center Corporate Technical Operations SAMSUNG Electronics, Vol. 1, Dec 1997, pages 89-92.															
[Signature]		MARIE-LAURE BOUCHERET, IVAR MORTENSEN and HENRI FAVARO, "Fast Convolution Filter Banks For Satellite Payloads with On-Board Processing," IEEE Journal On Selected Areas In Communications, Vol. 17, No. 2, February 1999, pp. 238-247															
[Signature]		W.H. YIM and F.P. COAKLEY, "On-Board Processing For KA-Band Applications", University of Surrey, UK, Publication Date, February 11, 1993., XP 000458011, pp. 225-229.															
[Signature]		HASHIDA MITSUYOSHI, "Hierarchical Network Management System and Control Method for Network Management Information," Patent Abstracts of Japan, Publication No. 07226777															

Examiner Signature		Date Considered	1/13/05
--------------------	---	-----------------	---------

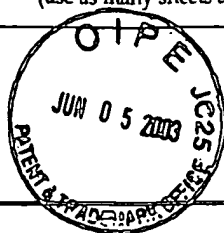
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.:	Application Number:
	04259.P035	09/955,537
	First Named Inventor:	
	Manish Shah	
	Filing Date:	
	September 17, 2001	



U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
<i>sw</i>		5,778,192		Schuster, et al.	7-7-1998	
<i>sw</i>		6,157,997		Oowaki, et al.	12-5-2000	

RECEIVED

JUN 06 2003

Technology Center 2600

FOREIGN PATENT DOCUMENTS

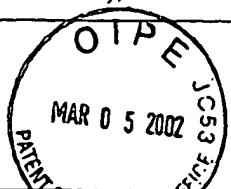
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³ Code ⁵	Number ⁴	Kind (If known)				
<i>a</i>		EP	0 762 777		Uchiumi, Tadasgu, et al.	3-12-1997		

Examiner Signature	<i>Jim Allen</i>	Date Considered	1/13/05
--------------------	------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 04259.P035	Application Number: 09/955,537
	First Named Inventor: Manish Shah, et al.	RECEIVED MAR 08 2002 Technology Center 2600
	Filing Date: September 17, 2001	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
		6,148,043		Fujimoto	11/14/2000	
		6,141,391		Morelos-Zaragoza, et al.	10/31/2000	
		6,138,265		Morelos-Zaragoza, et al.	10/24/2000	
		6,119,265		Hara	09/12/2000	
		5,974,095		Kitaura, et al.	10/26/1999	
		6,195,642	B1	Izumi, et al.	02/27/2001	
		6,122,325		Mogre, et al.	09/19/2000	
		6,049,573		Song	04/11/2000	
		6,005,640		Strolle, et al.	12/21/1999	

FOREIGN PATENT DOCUMENTS

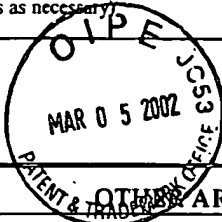
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				


Examiner Signature		Date Considered	1/13/05
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 04259.P035	Application Number: 09/955,537
		First Named Inventor: Manish Shah, et al.	RECEIVED
		Filing Date: September 17, 2001	MAR 08 2002
OTHER ART - NO PATENT LITERATURE DOCUMENTS			Technology Center 2600
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
✓		JOHN G. PROAKIS, Block and Convolutional Channel Codes, Digital Communications, Fourth Edition, Pages 416 - 547, McGraw-Hill Series in Electrical and Computer Engineering, New York, NY.	
		"www.inventra.com/inventra/softcore/workshop/MultiRaFiltDes95/" MENTOR GRAPHICS, Hardware Design of Decimators/Interpolators, Pages 1-38.	
		"www.mentor.com/inventra/softcore/workshop/SDmod95/", MENTOR GRAPHICS, Introduction to AD/DA Converters, Pages 1-27.	
		http://www.mentor.com/inventra/softcore/workshop/SDHWDes95/ MENTOR GRAPHICS, Design of the Decimation & Interpolation Filters, Pages 1-57.	
✓		http://www.mentor.com/inventra/softcore/workshop/Applications95/, MENTOR GRAPHICS, Sigma Delta Converter Applications, Pages 1-5.	

Examiner Signature		Date Considered	1/13/25
--------------------	---	-----------------	---------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.